

## Message Text

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67

ACTION EUR-12

INFO OCT-01 ARA-06 IO-11 ISO-00 AID-05 CEA-01 CIAE-00

COME-00 EB-07 FRB-03 INR-07 NSAE-00 CIEP-01 SP-02

STR-04 TRSE-00 LAB-04 SIL-01 SAM-01 OMB-01 DODE-00

FPC-01 H-02 INT-05 L-03 NSC-05 PM-04 USIA-06 OES-03

SS-15 FEA-01 NRC-05 AF-06 /123 W  
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R 091715Z MAR 76

FM USMISSION EC BRUSSELS

TO ERDA WASHDC

INFO SECSTATE WASHDC 706

AMEMBASSY BONN

AMEMBASSY BRASILIA

USMISSION IAEA VIENNA

C O N F I D E N T I A L EC BRUSSELS 02385

ERDA PASS N. SIEVERING, AIA

E.O. 11652: GDS

TAGS: TECH

SUBJECT: URANIUM ENRICHMENT

1. DISCUSSION OCCURED LAST WEEK BETWEEN J.H. RUBIN, SENOR ERDA REP., AND DR. RUDOLF HARDE, PRESENTLY CHAIRMAN OF THE BOARD FOR GFK, WHICH IS THE OPERATING ORGANIZATION FOR THE KARLSRUHE NUCLEAR RESEARCH CENTER. DR. HARDE ASSUMED THIS POSITION IN JANUARY 1976, AND WAS FORMERLY TECHNICAL MANAGING DIRECTOR AT INTERATOM.

2. IN DESCRIBING ACTIVITIES CARRIED OUT AT KARLSRUHE, DR. HARDE INCLUDED THE NOZZLE PROCESS FOR ENRICHING URANIUM. HE MENTIONED THAT ONE OF THE FACTORS SUPPORTING FRG'S INCLUDING NOZZLE TECHNOLOGY IN THE NUCLEAR EXCHANGE AGREEMENT WITH BRAZIL WAS THE KNOWLEDGE ITS STATUS OF DEVELOPMENT LIMITED THE PROCESS  
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TO LOW ENRICHMENT CAPABILITY. ACCORDING TO DR. HARDE, THIS

WAS DUE TO EQUIPMENT DESIGN AND EFFICIENCY, COUPLED WITH A PLANT LAYOUT WHICH PRECLUDED RECYCLE OF THE GAS STREAM. RUBIN COMMENTED THAT HE DID NOT RECALL HEARING THIS ARGUMENT USED BEFORE. HARDE STATED IT WAS FREQUENTLY DISCUSSED IN FRG CIRCLES.

3. HARDE ALSO NOTED THAT THE NOZZLE PROCESS WAS A LARGE POWER CONSUMER AND ANY ATTEMPT TO ESTABLISH A SECRET PLANT WOULD BE EASILY DETECTED.

4. WHILE BASIS FOR CONFIDENCE THAT NOZZLE TECHNOLOGY IS NOT CAPABLE OF PRODUCING HIGH ENRICHED URANIUM IS NOT CLEARLY UNDERSTOOD, ABOVE DISCUSSION IS REPORTED FOR FURTHER ASSESSMENT. ALSO, SINCE THE ARGUMENT HAS NOT BEEN OBSERVED BEFORE NOW, IT COULD EVENTUALLY SURFACE IN THE FRG, BRAZIL AND EVEN THROUGH S. AFRICAN EXPLOITATION OF THEIR "FIXED WALL CENTRIFUGE" SYSTEM. HINTON

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## Message Attributes

**Automatic Decaptioning:** X  
**Capture Date:** 01 JAN 1994  
**Channel Indicators:** n/a  
**Current Classification:** UNCLASSIFIED  
**Concepts:** MEETING AGENDA, URANIUM, DIPLOMATIC DISCUSSIONS, MEETING REPORTS  
**Control Number:** n/a  
**Copy:** SINGLE  
**Draft Date:** 09 MAR 1976  
**Decaption Date:** 01 JAN 1960  
**Decaption Note:**  
**Disposition Action:** RELEASED  
**Disposition Approved on Date:**  
**Disposition Authority:** GolinoFR  
**Disposition Case Number:** n/a  
**Disposition Comment:** 25 YEAR REVIEW  
**Disposition Date:** 28 MAY 2004  
**Disposition Event:**  
**Disposition History:** n/a  
**Disposition Reason:**  
**Disposition Remarks:**  
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**Executive Order:** GS  
**Errors:** N/A  
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**Status:** NATIVE  
**Subject:** URANIUM ENRICHMENT  
**TAGS:** TECH, ERDA, GFK, (RUBIN, J H), (HARDE, RUDOLF)  
**To:** ERDA  
**Type:** TE  
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